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jennifer.hardin@ericsson.com  
melissa.rhea@ericsson.com



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/551,082  
Filing Date: September 27, 2005  
Appellant(s): HANNU ET AL.

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Roger S. Burleigh  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 2/22/2010 appealing from the Office action  
mailed 7/20/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. Claims 39-53 rejected under 35 U.S.C. 101.

### **NEW GROUND(S) OF REJECTION**

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim element “communications unit” is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.

Applicant is required to:

- (a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- (b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

Hannu et al., RFC 3321, Network Working Group, pp. 1-22

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

I. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

II. Claims 27-53 are rejected under 35 U.S.C. 102(a) as being anticipated by Hannu et al. in RFC 3321, which was published January 2003.

**With respect to 27,** In RFC 3321, Hannu discloses initiating said message-based inter-unit communication by providing, in said first communications unit, a state comprising communications unit-associated data common to multiple communications messages to be transmitted between said first communications unit and said second communications unit (pg. 3, Figure 1) generating a copy of said state (pg. 4, “4.1.

Overview of...”, lines 3-4, “If compressor...”) transmitting said state copy and a first identifier of said state copy from said first communications unit to said second communications unit (pg. 7, Figure 2, *where it can be seen that m1(s0) is transmitted from the first unit to the second*) generating a second identifier based on said received state copy (pg. 5, paragraph 1, “Legend: Message 1...”) comparing said received first identifier and said generated second identifier (pg. 9, “(4): If endpoint 2...”) storing said state copy in said second communications unit (pg. 7, Figure 2) and processing, if said second identifier corresponds to said first identifier, a communications message of said multiple communications messages using said state or said state copy by modulating a size of said communications message based on at least a portion of said communications unit-associated data (pg. 4, “4.1. Overview of...”, *where the message is compressed and decompressed*)

**With respect to 28,** In RFC 3321, Hannu discloses said first communications unit removing at least a portion of said communications unit-associated data in said state from said communications message to obtain a reduced-size communications message (pg. 4, “4.1. Overview of...”, *where the message is compressed and decompressed*) and said first communications unit transmitting said reduced-size communications message to said second communications unit (pg. 7, Figure 2)

**With respect to 29,** In RFC 3321, Hannu discloses said second communications unit adding at least a portion of said communications unit-associated data in said state copy to said reduced-size communications message to obtain said communications message (pg. 4, “4.1. Overview of...” )

**With respect to 30,** In *RFC 3321*, Hannu discloses said second communications unit removing at least a portion of said communications unit-associated data in said state copy from said communications message to obtain a reduced-size communications message (pg. 7, Figure 2) and said second communications unit transmitting said reduced-size communications message to said first communications unit (pg. 7, Figure 2)

**With respect to 31,** In *RFC 3321*, Hannu discloses said first communications unit adding at least a portion of said communications unit-associated data in said state to said reduced-size communications message to obtain said communications message (pg. 7, Figure 2)

**With respect to 32,** In *RFC 3321*, Hannu discloses storing said state copy in a compartment dedicated to said first communications unit at said second communications unit if said second identifier corresponds to said first identifier (pg. 7, Figure 2)

**With respect to 33,** In *RFC 3321*, Hannu discloses copying said state copy from said compartment dedicated to said first communications unit at said second communications unit to a locally available state memory at said second communications unit (pg. 7, Figure 2)

**With respect to 34,** In *RFC 3321*, Hannu discloses storing said state in a locally available state memory at said first communications unit (pg. 7, Figure 2)

**With respect to 35,** In *RFC 3321*, Hannu discloses said inter-unit communication comprises compressed message-based communication between said first and second communications unit, said method comprising the step of said first communications unit compressing said communications message based on said state, and said processing step comprises the step of said second communications unit decompressing said compressed communications message based on said state copy (pg. 7, Figure 2)

**With respect to 36,** In *RFC 3321*, Hannu discloses said inter-unit communication comprises compressed message-based communication between said first and second communications unit, said method comprising the step of said second communications unit compressing said communications message based on said state copy, and said processing step comprises the step of said first communications unit decompressing said compressed communications message based on said state (pg. 7, Figure 2)

**With respect to 37,** In *RFC 3321*, Hannu discloses said multiple communications messages are compressed using a SigComp compression (Abstract)

**With respect to 38,** In *RFC 3321*, Hannu discloses said second communications unit receiving an acknowledge identifier from said first communication unit (pg. 7, “5.1. Explicit Acknowledgement...”) and said second communications unit returning said acknowledge identifier to said first communications unit if said second identifier corresponds to said first identifier (pg. 7, “5.1. Explicit Acknowledgement...”)

**With respect to 39,** In *RFC 3321*, Hannu discloses means for receiving a copy of a state comprising communications unit-associated data common to multiple communications messages to be transmitted between said communications unit and said external communications unit (pg. 7, Figure 2) means for receiving a first identifier of said state copy (pg. 7, Figure 2) means for generating a second identifier based on said received state copy (pg. 5, paragraph 1, “Legend: Message 1...”) means for comparing said received first identifier and said generated second identifier (pg. 9, “(4): If endpoint 2...”) storing said state copy (pg. 7, Figure 2) and means, responsive to said comparing means, for processing a communications message of said multiple communications messages using said stored state copy if said second identifier corresponds to said first identifier, said processing means being configured for modulating a size of said communications message based on at least a portion of said communications unit-associated data in said state copy (pg. 4, “4.1. Overview of...”, *where the message is compressed and decompressed*)

**With respect to 40,** In *RFC 3321*, Hannu discloses said communications message is a reduced-size communications message and processing means comprises means for adding at least a portion of said communications unit-associated data in said state copy to said reduced-size communications message (pg. 7, Figure 2)

**With respect to 41,** In *RFC 3321*, Hannu discloses a compressor and decompressor, said adding means being provided in said decompressor for decompressing a received compressed communications message from said external communications unit by adding said at least a portion of said communications unit-

associated data in said state copy to said compressed communications message (pg. 7, Figure 2)

**With respect to 42,** In *RFC 3321*, Hannu discloses said processing means comprises means for removing at least a portion of said communications unit-associated data in said state copy from said communications message (pg. 7, Figure 2)

**With respect to 43,** In *RFC 3321*, Hannu discloses a compressor and decompressor, said removing means being provided in said compressor for compressing a communications message intended to said external communications unit by removing said at least a portion of said communications unit-associated data in said state copy from said communications message (pg. 7, Figure 2)

**With respect to 44,** In *RFC 3321*, Hannu discloses said compressor and decompressor are configured for signal compression and decompression using a SigComp protocol (Abstract)

**With respect to 45,** In *RFC 3321*, Hannu discloses said comparing means is configured for generating a storing command if said second identifier corresponds to said first identifier and said storing means is configured for storing said state copy upon reception of said storing command (pg. 7, Figure 2)

**With respect to 46,** In *RFC 3321*, Hannu discloses said storing means is configured for storing said state copy in a compartment dedicated to said external communications unit (pg. 7, Figure 2)

**With respect to 47,** In *RFC 3321*, Hannu discloses means for copying said state copy from said compartment dedicated to said external communications unit to a locally available state memory (pg. 7, Figure 2)

**With respect to 48,** In *RFC 3321*, Hannu discloses responsive to said comparing means, for transmitting an acknowledge identifier to said external communications unit if said second identifier corresponds to said first identifier (pg. 7, “5.1. Explicit Acknowledgement...”)

**With respect to 49,** In *RFC 3321*, Hannu discloses means for generating a state comprising communications unit-associated data common to multiple communications messages to be transmitted between said communications unit and said external communications unit (pg. 7, paragraph 1, “Legend: Message 1...”) means for storing said state (pg. 7, Figure 2) means for generating a copy of said state (pg. 4, “4.1. Overview of...”, lines 3-4, “If compressor...”) means for providing said state copy for storage in said external communications unit and for providing a first identifier of said state copy to said external communications unit (pg. 7, Figure 2) means for receiving an acknowledge identifier from said external communications, said acknowledge identifier being transmitted in response to a correspondence between said first identifier and a second identifier, said second identifier being generated by said external communications unit based on said state copy (pg. 7, “5.1. Explicit Acknowledgement...”) and means, responsive to said receiving means, for processing a communications message of said multiple communications messages using said stored state if said second identifier corresponds to said first identifier as determined by

reception of said acknowledge identifier (pg. 7, “5.1. Explicit Acknowledgement...”), said processing means being configured for modulating a size of said communications message based on at least a portion of said communications unit-associated data in said state (pg. 4, “4.1. Overview of...”)

**With respect to 50,** In *RFC 3321*, Hannu discloses said processing means comprises means for removing at least a portion of said communications unit-associated data in said state from said communications message (pg. 7, Figure 2)

**With respect to 51,** In *RFC 3321*, Hannu discloses a compressor and decompressor, said removing means being provided in said compressor for compressing a communications message intended to said external communications unit by removing said at least a portion of said communications unit-associated data in said state from said communications message (pg. 7, Figure 2)

**With respect to 52,** In *RFC 3321*, Hannu discloses said communications message is a reduced-size communications message and said processing means comprises means for adding at least a portion of said communications unit-associated data in said state to said reduced-size communications message (pg. 7, Figure 2)

**With respect to 53,** In *RFC 3321*, Hannu discloses a compressor and decompressor, said adding means being provided in said decompressor for decompressing a received compressed communications message from said external communications unit by adding said at least a portion of said communications unit-

associated data in said state to said compressed communications message (pg. 7, Figure 2)

#### **(10) Response to Argument**

**With respect to claim 27**, the appellant states Hannu fails to teach both endpoints must first have access to an initial state (s0) based on which new states (s1, s2, s3) can be generated because RFC 3321 is silent about how the initial state will be exchanged between endpoints. However, the feature of "both endpoints must first have access to an initial state (s0) based on which new states (s1, s2, s3) can be generated" and "the initial state will be exchanged between endpoints" are not cited in the claim.

The appellant also states Hannu fails to teach states are applicable to multiple messages communicated between the endpoints and includes endpoint-associated data, and wherein both endpoints store their respective copy of the state. The examiner respectfully disagrees with the appellant. In Figure 2, pg. 7, Hannu describes initial state 0 (s0) is used to create state 1 (s1), wherein these states are used in messages m2 and m3. State 1 is common to both messages and saved at both endpoints Compressor 1 and Decompressor 2.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer

exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,  
/Esther Benoit/

/Philip C Lee/

Acting Supervisory Patent Examiner, Art Unit 2442

Conferees:

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446

/Philip C Lee/

Acting Supervisory Patent Examiner, Art Unit 2442

**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

/Jack Harvey/

Director, Technology Center 2400